



Phase I - Renewable Energy Study

Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

- Cayuse, Umatilla, and Walla Walla Tribes
- Treaty of 1855
- Constitution and Bylaws 1949
- Nine member Board of Trustees
 - Elected by General Council members over 18 years old
 - Members of BOT and General Council sit on Commissions
- Approximately 2350 enrolled members
- Umatilla Indian Reservation
 - ~187,000 acres
 - Checker boarded



Signatories of the Walla Walla Treaty Council

Energy and Economic Development

- **2nd Largest Employer in Umatilla Co.**
- **Established Businesses**
 - Wildhorse Casino
 - TCI
 - Golf Course
 - Truck Plaza
 - Missions Market
 - Mission Grain Elevator
- **Ventures**
 - Industrial Park
 - Radio Station
 - Wanapa Energy Center



Project Overview

Objective

- Identify, assess and evaluate renewable energy development opportunities in and near the UIR

Task 1. Assess Renewable Energy Resources

- Wind, Solar, Biomass
- Use GIS tools to identify and map available resources and infrastructure

Task 2. Determine Development Viability

- Evaluate technically, economically, and culturally appropriate development paths
- Industrial, commercial, and residential options
- Research available technologies

Task 3. Develop Business Plan

- Prioritize options and develop business plan

Applications Being Evaluated

- Wind Energy
- Solar – PV and Thermal
- Biomass – Pellet Fuels
- Biomass – Biodiesel
- Biomass – Alcohol Fuel



Guiding Philosophy

- **Energy**, just as air, water and food is an essential natural resource. All these resources are connected and interdependent. What you do to one affects the others. Quality of life depends on the wise choices in the use of these resources.



Wind Energy

- Resource assessment
- Residential, commercial and industrial application
- Ordered 4 wind energy measurement systems



Biomass

- Bio-diesel
- Pellet fuel
- Alcohol



Biomass



Solar

- Evaluated PV Application for Cultural Museum
 - A carport with 30kWAC PV array
- Visited State Line and Energy NW wind energy farms



Capacity Building

- Visited pellet fuel manufacture plant
- Visited Energy NW Wind Energy Farm
- Workshops and training,
- Community outreach